

CLAIMS

1. A multi-layer magnetic part, comprising:

5 a composite sheet the center and periphery of which are a magnetic pattern and a part of which except the center and periphery is a dielectric pattern comprising a nonmagnetic body;

a primary winding that is located on one face of the dielectric pattern and around the center;

10 a secondary winding that is located on the other face of the dielectric pattern and around the center; and

a pair of magnetic sheets that hold the composite sheet and primary and secondary windings from both sides and contact one another via the magnetic pattern.

15 2. The multi-layer magnetic part according to claim 1, wherein the composite sheet the center and periphery of which are a magnetic pattern and a part of which except the center and periphery is a dielectric pattern comprising a nonmagnetic body is inserted between the magnetic sheet and the primary or 20 secondary winding.

3. The multi-layer magnetic part according to claim 1 or 2, wherein the composite sheet is stacked in a plurality of layers; and

25 through-holes connecting respectively a plurality of primary windings and a plurality of secondary windings located with the dielectric pattern of the composite sheets interposed therebetween are provided in the composite sheets.

30 4. The multi-layer magnetic part according to claim 1, 2, or

3, wherein the film thickness of the magnetic pattern and the film thickness of the dielectric pattern of the composite sheet are equal.

5 5. A method of fabricating the multi-layer magnetic part according to any of claims 1 to 5, comprising the steps of:

creating the magnetic sheet by applying a magnetic body paste to a substrate and drying the paste;

10 creating the composite sheet separately by applying a nonmagnetic body paste to a substrate in the form of the dielectric pattern and applying a magnetic body paste to the substrate in the form of the magnetic pattern and drying the pastes;

15 creating the primary and secondary windings by applying a conductor paste to the composite sheet or the magnetic sheet and drying the paste; and

20 peeling the magnetic sheet and the composite sheet thus obtained from the substrate and stacking the magnetic sheet and composite sheet and pressurizing same to produce a stacked body, and firing the stacked body.